

Office Action Summary	Application No.	Applicant(s)	
	09/368,846	LEIGHTON, KEITH R.	
	Examiner	Art Unit	
	Jeff H. Aftergut	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 05 March 2002.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-10 and 12-30 is/are pending in the application.

4a) Of the above claim(s) 18-22 and 30 is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-10, 12-17 and 23-29 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-946)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>92</u>	6) <input type="checkbox"/> Other:

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Terminal Disclaimer

1. The terminal disclaimer does not comply with 37 CFR 1.321(b) and/or (c) because:

The person who signed the terminal disclaimer has failed to state his/her capacity to sign for the corporation or other business entity, and he/she has not been established as being authorized to act on behalf of the assignee.

2. An attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34

(a). See 37 CFR 1.321(b) and/or (c).

Double Patenting

Election/Restrictions

3. Newly submitted claim 30 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claim 30 is directed to the species of forming the cavity with the use of a spacer which was previously identified as a non-elected species which was elected without traverse (see below).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 30 has been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

4. Applicant's election of Group I, the species of milling to form the cavity, claims 1-10, 12-17, 23-29 in Paper No. 8 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

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Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-17 and 23-29 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6,036,099.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims presented herein are generic to the operation as recited in the earlier patent and therefore the subject matter of the same are covered by the earlier claimed patent, see *In re Goodman*, 29 USPQ2d 2010 and paper no. 5, paragraph 11.

7. Claims 1-17 and 23-29 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. %,817,207 in view of Templeton, Jr, et al. Applicant is referred to paper no. 5, paragraph 12 for a complete discussion of the rejection.

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 6-176214 in view of UK 2,279,610 optionally further taken with UK 2,225,283 for the same reasons as expressed in paper no. 5, paragraph 14.

Newly presented claim 27 does not require the milling out of a cavity in the finished card (or for that matter the formation of a cavity in the card). The reference to Templeton Jr. et al cited in paper no. 5 paragraph 14 was used only to support the conclusion that it would have been obvious to form a cavity via milling in the card. The reference is not needed to reject newly presented claim 27 because the claim does not require the formation of a cavity.

Japanese Patent '214 taught a process for forming a smart card which included the steps of laminating with heat and pressure an assembly which included an IC chip 11 and a thin coil 12 (an antennae). The IC chip 11 and antennae 12 were disposed unsupported between plastic films 14. On either side of plastic films 14 were additional plastic films 15. The assembly was disposed in a press and heat and pressure were applied in order to laminate the layers together to form the smart card. The reference to Japanese Patent '214 failed to teach that the heat and pressure laminating operation included a cooling operation while the press remained under pressure.

However, in the art of making a laminated smart card, it was known as evidenced by UK '610 that one skilled in the art when laminating the same together would not have applied high heat and pressure and then removed the same in the lamination operation for processing under such extreme conditions would lead to damage of the chip and/or antennae in the laminate. The reference to UK '610 suggested that one skilled in the art would have interposed a printed circuit 11 with reinforced elements 19 between two outer sheets 37 and 38 of thermoplastic in the PVC

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family with interposed polyester layers coated with thermally activated catalyst adhesive and the assembly was disposed between pressing plates. The assembly was heated and then pressure applied to the same in order to encapsulate the electrical components of the card. Subsequent to the application of this heat and pressure, the pressure was maintained while the card was allowed to cool in the press, see page 11, line 16-page 12, line 12. The reference made clear that in order to avoid damaging the integrated circuit which was being encapsulated that one would have heated the assembly, then applied heat and pressure to the assembly in the press and then cooled the assembly while pressure was maintained. Clearly, one viewing the same would have understood that heat and pressure as well as cooling under pressure would have been performed when laminating the card with the integrated circuit therein. Note that Japanese Patent '214 performed the lamination operation in a heated press. Because it was known to laminate the cards in a press under heat and pressure and because the reference to UK '610 suggested heating and cooling in the press to avoid damaging the cards, it would have been obvious to one of ordinary skill in the art of manufacturing a smart card according to the operations of Japanese Patent 6-176214 wherein the pressing operation was performed in a heated press where the pressure was maintained during the cooling operation as suggested by UK 2,279,610.

While it is believed that the reference to UK '610 suggested that one would have ramped up the pressure during the laminating operation, to further evidence that the highest amount of pressure would have been applied when the assembly was cooled, the reference to UK '283 is cited. UK '283 is manufacturing an integrated circuit card where the assembled layers (which included thin plastic layers which had printing on the layers as well as in integrated circuit therein) were laminated together in a press. The reference taught that the press would have been

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preheated, the pressure applied and then the assembly removed or the assembly would have been preheated and the pressure applied in steps with the highest pressure applied while the assembly was being cooled in the press, see page 11, lines 3-13. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a pressing operation in the manufacture of an integrated circuit card wherein the pressure applied would have been the highest when the card was being cooled in the press as suggested by UK 2,225,283 wherein the laminated card was formed by laminating with heat and pressure in a press as suggested by Japanese Patent 6-176214 and UK 2,279,610.

10. Claims 1, 4-10, 14-17 and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 6-176214 in view of UK 2,279,610 and Templeton, Jr. et al optionally further taken with UK 2,225,283 for the same reasons as expressed in paper no. 5, paragraph 14.

With regard to newly presented claims 25 and 26, note that the reference to UK '610 suggested that minimal pressure would have been applied during the initial closure of the press and that the pressure was simply enough to make the plastic layers contact the heated platens. Additionally recognize that the platens were heated during the pressing operation and thus the laminate was subject to heating during pressure application. The exact amount of pressure would have been a function of the material being worked upon and would have been determined through routine optimization based upon the plastic layers employed. Regarding claims 27-29 see the discussion in paper no. 5 for the formation of the cards.

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11. Claims 2, 3, 11-13, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 10 further taken with UK 2,294,899 for the same reasons as expressed in paper no. 5, paragraph 15.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 25, line 1, "the pressure" lacks proper antecedent basis because no pressure has been defined for step (c)(i) of the claim. It is suggested that "the" be deleted. In claim 25, line 1, it is suggested that "'is" be changed to --in--.

Response to Arguments

14. Applicant's arguments filed 3-5-02 have been fully considered but they are not persuasive.

The applicant argues that the terminal disclaimer has overcome the double patenting rejection. The applicant is advised that the terminal disclaimer has not been accepted because it was not signed by an attorney of record, see paragraphs 1 and 2 above.

The applicant argues that the reference to UK 2,279,610 is not available as prior art because applicant filed a provisional application and claims the benefit of the same. without addressing whether applicant has support for the claimed subject matter in the earlier filed provisional applications, the applicant is advised that the UK reference published on January 11,

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1995 which is before applicant's earliest effective date for domestic priority of October 17, 1995. The reference is available as prior art under 35 USC 102(a) because it is a printed foreign patent which was published prior to applicant's effective filing date.

The applicant next addressed the reference to UK 2,225,283 and argues that the reference did not preheat outside of the press and did not change the pressure to supply the highest amount of pressure during the cooling. The applicant is advised that the reference was an optional reference to further express that in the pressure cycle of UK '610 the maximum pressure would have been applied during the cooling operation. Because applicant did not address the teachings of UK '610 (other than to state that it was not a reference), it is believed that applicant agrees with the Office interpretation that the reference produced a card with heat and pressure wherein the same went through a pressure cycle where greater pressure would have been applied in the cooling cycle. UK '283 further evidenced the same. at page 11, lines 10-13 of UK '283 it was clear that those skilled in the art would have gradually increased the pressure during lamination until the cooling cycle was reached where the maximum pressure was applied.

No claims are allowed.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 703-308-2069. The examiner can normally be reached on Monday-Friday 6:30-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Jeff H. Aftergut
Primary Examiner
Art Unit 1733

JHA
May 7, 2002

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11/1a-207 3308647986 P.01

#12/10/02

Practitioner's Docket No. 6014-2-CON

PATENT

10/4/02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Keith R. Leighton Group No.: 1733
Application No.: 09/368,846 Examiner: Aftergut
Filed: 08/05/1999 Date: October 2, 2002

For: HOT LAMINATION PROCESS FOR THE MANUFACTURE OF A COMBINATION
CONTACT/CONTACTLESS SMART CARD AND PRODUCT RESULTING THEREFROM

RESPONSE UNDER
37 C.F.R. § 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP

OFFICIAL
FAX RECEIVED
OCT 03 2002
GROUP 1700

Box AF
Commissioner for Patents
Washington, D.C. 20231

AMENDMENT OR RESPONSE AFTER FINAL REJECTION--TRANSMITTAL

1. Transmitted herewith is an amendment after final rejection (37 C.F.R. 1.116) for this application.

STATUS

2. Applicant is a small entity. A statement was already filed.

EXTENSION OF TERM

3. The proceedings herein are for a patent application and the provisions of 37 C.F.R. 1.136 apply. Applicant petitions for an extension of time under 37 C.F.R. 1.136 (fees: 37 C.F.R. 1.17(a)(1)-(4)) for two months:

Fee: \$200.00

CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10*

I hereby certify that, on the date shown below, this correspondence is being facsimile transmitted to the Patent and Trademark Office, (703) 305-7718.

Date: October 2, 2002

Michael H. Minns
Signature

Michael H. Minns
(type or print name of person certifying)

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FEE FOR CLAIMS

4. The fee for claims (37 C.F.R. 1.16(b)-(d)) has been calculated as shown below:

	(Col. 1) Claims Remaining After Amendment	(Col. 2) Highest No Previously Paid For	(Col. 3) Present Extra	SMALL ENTITY Rate	Addit Fee
Total	23	Minus 27	= 0	x \$9 =	\$0
Indep	2	Minus 3	= 0	x \$42 =	\$0
First Presentation of Multiple Dependent Claim				+ \$140 =	\$0
				Total Addit. Fee	\$0

Total additional fee for claims required \$0.00

FEE PAYMENT

5. Authorization is hereby made to charge the amount of \$200.00 to Deposit Account No. 15-0450.

Charge any additional fees required by this paper or credit any overpayment in the manner authorized above.

A duplicate of this paper is attached.

FEE DEFICIENCY

6. If any additional extension and/or fee is required, charge Account No. 15-0450.

If any additional fee for claims is required, charge Account No. 15-0450.

Date: October 2, 2002

Reg. No.: 31,985
Tel. No.: 330-864-5550
Customer No.: 021324


Signature of Practitioner

Michael H. Minns
HAHN LOESER & PARKS LLP
1225 West Market Street
Twin Oaks Estate
Akron, OH 44313

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Docket No.: 6014-2-CON

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

10/9/02

In re patent application of: Keith Leighton

Group Art Unit: 1733

Serial No.: 09/368,846

Examiner: J. Aftergut

JH
10/9/02

Filed: August 5, 1999

For: Hot Lamination Process for the Manufacture of a Combination
Contact /Contactless Smart Card and Product Resulting Therefrom

AMENDMENT AND REQUEST FOR RECONSIDERATION
UNDER 37 C.F.R. §1.111

Assistant Commissioner For Patents
Washington, D.C. 20231

OFFICIAL
FAX RECEIVED
OCT 03 2002
GROUP 1700

Sir:

In response to the Official Action dated May 8, 2002, please amend the above-identified application as follows:

IN THE CLAIMS:

Cancel claims 6, 18 through 22 and 30.

1. (Twice Amended) A process for incorporating at least one electronic element in the manufacture of a plastic card, comprising the steps of:
 - (a) providing first and second plastic core sheets;

B

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Serial No. 09/368,848

(b) positioning said at least one electronic element in the absence of a non-electronic carrier directly between said first and second plastic core sheets to form a core, said plastic core sheets defining a pair of inner and outer surfaces of said core;

(c) positioning said core in a laminator apparatus, and subjecting said core to a heat and pressure cycle, said heat and pressure cycle comprising the steps of:

(i) heating said core for a first period of time;

(ii) applying a first pressure to said core for a second period of time such that said at least one electronic element is encapsulated by said core;

(iii) cooling said core while applying a second pressure to said core, the second pressure being at least 10% greater than the first pressure; and

(d) milling a region of said core to a controlled depth so as to form a cavity which exposes at least one contact pad of said at least one electronic element.

15. (Amended) A process as recited in claim 1 comprising the further step of inserting ~~an electronic contact element~~ a second electronic element into said cavity, the second electronic element being in electrical communication with the at least one electronic element.

25. (Amended) The process according to claim 1, wherein the pressure on said core ~~is in~~ step (c)(i) is less than 10 p.s.i.

27. (Amended) A process for incorporating at least one electronic element in the manufacture of a plastic card, comprising the steps of:

(a) providing first and second plastic core sheets;

(b) positioning said at least one electronic element in the absence of a non-electronic carrier directly between said first and second plastic core sheets to form a core, said plastic core sheets defining a pair of inner and outer surfaces of said core;

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(c) positioning said core in a laminator apparatus, and subjecting said core to a heat and pressure cycle, said heat and pressure cycle comprising the steps of:

- (I) heating said core for a first period of time;
- (II) applying a first pressure to said core for a second period of time such that said at least one electronic element is encapsulated by said core;
- (III) cooling said core while applying a second pressure to said core, the second pressure being at least 10% greater than the first pressure.

29. (Amended) The process according to claim 28, wherein the step of forming a cavity in said core comprises:

after step (c), milling a region of said core to a controlled depth so as to form a cavity which exposes at least one contact pad of said at least one electronic element.

31. (New) The process according to claim 29, further comprising:

inserting a second electronic element into said cavity, the second electronic element being in electrical communication with the at least one electronic element.

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REMARKS

Claims 1 through 5, 7 through 10, 12 through 17, 23 through 29 and 31 are in the case. Claims 1, 15, 25, 27 and 29 are amended by this amendment. Claims 6, 18 through 22 and 30 are cancelled by this amendment. Claim 31 is added by this amendment.

All claims directed to the non-elected invention have been cancelled.

Attached is a clean version of the changes made to the specification and claims by the current amendment. The attached pages are captioned "**Clean Version Incorporating Changes Made**"

The Examiner stated that the terminal disclaimer filed on February 18, 2002 does not comply with 37 C.F.R. § 1.321 (b) and/or (c) because the attorney, Michael H. Minns, who signed the terminal disclaimer is not of record and therefore is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity.

Enclosed is an Associate Power of Attorney signed by the attorney of record, Mark A. Watkins appointing Michael H. Minns, along with others, to represent Applicant in this application. Also enclosed is a new terminal disclaimer signed by an attorney of record.

Claims 1 through 17, 23 through 29 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 through 16 of U.S. Patent no. 6,036,099. Claims 1 through 17, 23 through 29 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 through 17 of U.S. Patent No. 5,817,207 in view of Templeton, Jr. et al.

Enclosed is a terminal disclaimer disclaiming the term of any patent that issues from this application that extends beyond the term of U.S. Patent No. 6,036,099 or

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U.S. Patent No. 5,817,207. Applicant submits that this terminal disclaimer obviates this rejection.

Claim 27 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent 6-176214 in view of UK 2,279,610 optionally further taken with UK 2,225,283. Claims 1, 4 through 10 and 14 through 17 and 25 through 29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent 6-176214 in view of UK 2,279,610 and Templeton, Jr. et al optionally further taken with UK 2,225,283. Claims 2, 3, 11 through 13, 23 and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent 6-176214 in view of UK 2,279,610 and Templeton, Jr. et al optionally further taken with UK 2,225,283, and further taken with UK 2,294,899.

Independent claims 1 and 27 have been amended to require that the second pressure be at least 10% greater than the first pressure. With respect to UK 2,279,610, on page 12, lines 8-10, the patent application discloses that after the temperature has been raised to about 155°C, full lamination pressure is applied. Next, while still under pressure the assembly is cooled and brought down to room temperature. UK '610 is silent as to what pressure is used while the laminated card assembly is being cooled. There is no teaching or suggestion in UK '610 to **increase the pressure during cooling to at least 10% greater than the pressure applied during heating**, as claimed by Applicant in independent claims 1 and 27.

With respect to UK 2,225,283, on page 11, lines 6-13, the patent application discloses that the lamina build-up is either placed into a pre-heated press and then full pressure is immediately applied or the pressure is gradually increased. In one example, the press is pre-heated to 140°C and then pressure is applied in steps. Finally, the laminate is cooled with the pressure *maintained* at its highest value. UK '283 teaches *maintaining* the pressure during cooling at its highest value. UK '283 does not teach or disclose increasing the pressure during the cooling process. One skilled in the art would not be able to conclude that UK '283 teaches increasing pressure during

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the cooling process. Rather, one skilled in the art would conclude that the phrase "maintaining the pressure during cooling at its highest pressure" refers to maintaining pressure during cooling at the highest pressure applied during heating. There is no teaching or suggestion in UK '283 to **increase the pressure during cooling to at least 10% greater than the pressure applied during heating**, as claimed by Applicant in independent claims 1 and 27.

The problem being solved by Applicant is the problem of forming a laminated card with embedded computer chips and electronics that are thin enough to work in connection with existing card reading machinery (specification, page 3, lines 11-20). The problem being solved by UK '283 is preventing flexing of the card, which can cause cracking in the card layers, page 1, lines 15-17. UK '283 then addresses this problem by orienting the "grain" in different card layers at right angles to one another (page 3, lines 23-31) and by embedding star shaped stress reduction members in the laminate (page 4, lines 28-31). Because UK '283 is solving a different problem, laminate cracking, than the problem being solved by Applicant, overall thickness of the laminated card, one skilled in the art would not consider UK '283 to be relevant to the problem of overall card thickness. Therefore, even if UK '283 taught increasing the pressure during cooling, there would be no motivation to combine UK '283 with the other references to solve the problem of card thickness.

Even assuming that the combination of Japanese Patent 6-176214 in view of UK 2,279,610 optionally further taken with UK 2,225,283 were a proper combination, the three references do not teach or suggest, either singly or in combination, Applicant's method as claimed in claims 1 and 27 where the laminate core is cooled while applying a pressure at least 10% greater than the pressure applied to the heated core. Further, this amendment should not require additional searching or raise additional issues because the limitation that the pressure during cooling is at least 10% greater than the pressure applied to the heated core has been present in claim 7 as originally filed.

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In view of the above, it is respectfully submitted that claims 1 through 5, 7 through 10, 12 through 17, 23 through 29 and 31 are in condition for allowance. Reconsideration of the rejections is requested and allowance of the claims is solicited.

Respectfully submitted,
Hahn Loeser & Parks LLP

Date October 2, 2002


Michael H. Minns
Reg. No. 31,985

Hahn Loeser + Parks LLP
1225 West Market Street
Akron, Ohio 44313
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OCT-02-2002 15:03

HAHN LOESER + PARKS

3308647986 P.10

Docket No. 6014-2-CON
Serial No. 09/368,846

Clean Version Incorporating Changes Made

IN THE CLAIMS:

Cancel claims 6, 18 through 22 and 30.

1. (Twice Amended) A process for incorporating at least one electronic element in the manufacture of a plastic card, comprising the steps of:

- (a) providing first and second plastic core sheets;
- (b) positioning said at least one electronic element in the absence of a non-electronic carrier directly between said first and second plastic core sheets to form a core, said plastic core sheets defining a pair of inner and outer surfaces of said core;
- (c) positioning said core in a laminator apparatus, and subjecting said core to a heat and pressure cycle, said heat and pressure cycle comprising the steps of:

- (i) heating said core for a first period of time;
- (ii) applying a first pressure to said core for a second period of time such that said at least one electronic element is encapsulated by said core;
- (iii) cooling said core while applying a second pressure to said core, the second pressure being at least 10% greater than the first pressure; and
- (d) milling a region of said core to a controlled depth so as to form a cavity which exposes at least one contact pad of said at least one electronic element.

15. (Amended) A process as recited in claim 1 comprising the further step of inserting a second electronic element into said cavity, the second electronic element being in electrical communication with the at least one electronic element.

25. (Amended) The process according to claim 1, wherein the pressure on said core in step (c)(i) is less than 10 p.s.i.

OCT-02-2002 15:03

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3308647986 P.11

Docket No. 6014-2-CON
Serial No. 09/368,846

B4 20/21. (Amended) A process for incorporating at least one electronic element in the manufacture of a plastic card, comprising the steps of:

- (a) providing first and second plastic core sheets;
- (b) positioning said at least one electronic element in the absence of a non-electronic carrier directly between said first and second plastic core sheets to form a core, said plastic core sheets defining a pair of inner and outer surfaces of said core;
- (c) positioning said core in a laminator apparatus, and subjecting said core to a heat and pressure cycle, said heat and pressure cycle comprising the steps of:
 - (i) heating said core for a first period of time;
 - (ii) applying a first pressure to said core for a second period of time such that said at least one electronic element is encapsulated by said core;
 - (iii) cooling said core while applying a second pressure to said core, the second pressure being at least 10% greater than the first pressure.

B5 22/29. (Amended) The process according to claim 21, wherein the step of forming a cavity in said core comprises:
after step (c), milling a region of said core to a controlled depth so as to form a cavity which exposes at least one contact pad of said at least one electronic element.

B6 23/31. (New) The process according to claim 22, further comprising:
inserting a second electronic element into said cavity, the second electronic element being in electrical communication with the at least one electronic element.

OCT-02-2002 15:04

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3308647986 P.12

Practitioner's Docket No. 6014-2-CON

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Keith R. Leighton

Group No.: 1733

Application No.: 09/368,846

Examiner: Aftergut

Filed: 08/05/99

Date: October 1, 2002

For: Hot Lamination Process For The Manufacture of a Combination Contact/Contactless Smart Card and Product Resulting Therefrom

#14/102E
10/24/02

Commissioner for Patents
Washington, D.C. 20231

ASSOCIATE POWER OF ATTORNEY (37 C.F.R. § 1.34)

Please recognize as Associate Practitioners in this case:

Michael H. Minns, Reg. No. 31,985; Edwin W. Oldham, Reg. No. 22,003; Scott M. Oldham, Reg. No. 32,712; Stephen L. Grant, Reg. No. 33,390; R. Eric Gaum, Reg. No. 39,199; Alexander D. Bommarito, Reg. No. 44,036; Robert J. Clark, Reg. No. 45,835; Eryn R. Ace, Reg. No. 44,491; all of:

HAHN LOESER & PARKS LLP
Twin Oaks Estate
1225 West Market Street
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Tel. No. (330) 864-5550
Fax No. (330) 864-7986
Customer No. 021324

Date: 10/02/02

Reg. No.: 33,813
Tel. No.: 330-864-5550
Customer No.: 021324


Signature of Practitioner

Mark A. Watkins
HAHN LOESER & PARKS LLP
formerly Oldham & Oldham Co., L.P.A.
1225 West Market Street
Twin Oaks Estate
Akron, OH 44313

OCT-02-2002 15:04

HAHN LOESER + PARKS

3308647986

P.13

Practitioner's Docket No. 6014-2-CON

PATENT

#15
AW
10-8-03

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Keith Leighton

Group No.: 1733

Application No.: 09368,846

Examiner: J. Aftergut

Filed: August 5, 1999

Date: October 2, 2002

For: Hot Lamination Process for the Manufacture of a Combination
Contact/Contactless Smart Card and Product Resulting Therefrom

**Assistant Commissioner for Patents
Washington D.C. 20231**

**TERMINAL DISCLAIMER TO OBVIATE
A DOUBLE PATENTING REJECTION (37 C.F.R. Section 1.321(c))**

Identification of Person(s) Making This Disclaimer

I, Michael H. Minns, represent that I am the attorney of record.

EXTENT OF DISCLAIMANT'S INTEREST

The extent of the interest in this invention that the disclaimant owns is in the whole of this invention.

DISCLAIMER

(Obviousness-Type Double Patenting Rejection Over A Prior Patent)

Petitioner hereby disclaims, except as provided below, the terminal part of any patent granted on the instant application, which would extend beyond the expiration dates of Patent Nos. 5,817,207, and 6,036,099 as presently shortened by any terminal disclaimer(s). Petitioner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the above-listed patents are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors, or assigns.

In making the above disclaimer, 1) disclaimant is not admitting the propriety of the merits of the double patenting rejections; and 2) disclaimant does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. Sections 154 to 156 and

OCT-02-2002 15:04

Hahn Loeser + Parks

3308647986 P.14

Docket No. 6014-2-CON
Serial No. 09/368,846

173 of the patents forming the basis of the double patenting rejection, namely, Patent Nos. 5,817,207 and 6,036,099, as presently shortened by any terminal disclaimer, in the event that either patent later: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 C.F.R. Section 1.321, has all claims cancelled by a reexamination certificate, is reissued, or is in any manner terminated prior to expiration of its full statutory term as presently shortened by any terminal disclaimer, except for the separation of legal title stated above.

DISCLAIMER FEE (37 C.F.R. Section 1.20(d))

Small entity--fee \$55.00.

Small entity statement already filed in patent application 09/918,582 on August 18, 1997.

FEE PAYMENT

The \$55.00 fee was enclosed with the response filed March 5, 2002.

Charge Account No. 15-0450 for any fee deficiency.

Date: October 2, 2002

Reg. No.: 31,985
Tel. No.: 330-864-5550
Customer No.: 021324


Signature of Practitioner

Michael H. Minns
Hahn, Loeser & Parks, LLP
1225 West Market Street
Akron, OH 44313-7188

Interview Summary	Application No.	Applicant(s)	
	09/368,846	LEIGHTON, KEITH R.	
	Examiner	Art Unit	
	Jeff H. Aftergut	1733	

All participants (applicant, applicant's representative, PTO personnel):

(1) Jeff H. Aftergut. (3) _____

(2) Michael Minns. (4) _____

Date of Interview: 09 October 2002.

Type: a) ☒ Telephonic b) ☐ Video Conference
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.
If Yes, brief description: _____

Claim(s) discussed: 12 and 13.

Identification of prior art discussed: none.

Agreement with respect to the claims f) ☒ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: discussed a need to correct the dependency of claims 12 and 13 (which depended upon canceled claim 11) Also discussed correcting the claim to provide proper antecedent basis for the claim in relation to the coating provided on the core.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

i) ☒ It is not necessary for applicant to provide a separate record of the substance of the interview (if box is checked).

Unless the paragraph above has been checked, THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

Summary of Record of Interview Requirement.

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case unless both applicant and examiner agree that the examiner will record same. Where the examiner agrees to record the substance of the interview, or when it is adequately recorded on the Form or in an attachment to the Form, the examiner should check the appropriate box at the bottom of the Form which informs the applicant that the submission of a separate record of the substance of the interview as a supplement to the Form is not required.

It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Notice of Allowability	Application No.	Applicant(s)	
	09/368,846	LEIGHTON, KEITH R.	
	Examiner	Art Unit	
	Jeff H. Aftergut	1733	

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment after final dated 10-2-02.
2. ☒ The allowed claim(s) is/are 1-5, 7-10, 12-17, 23-29 and 31.
3. ☒ The drawings filed on 05 August 1999 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.
5. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.
9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1 <input type="checkbox"/> Notice of References Cited (PTO-892) 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material	2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9 <input type="checkbox"/> Other
--	--

Application/Control Number: 09/368,846
Art Unit: 1733

17/C
JHA
10/7/02
Page 2

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael Minns on 10-9-02.

The application has been amended as follows:

In the claims:

In claim 12, line 2, "11" has been changed to --1--.

In claim 12, line 2, "said" has been changed to --a--.

In claim 12, line 2, after the word "out" the language --on at least one surface of said core-- has been added.

In claim 13, line 2, "11" has been changed to --1--.

In claim 13, line 2, "said" has been changed to --a--.

In claim 13, line 2, after the word "out" the language --on at least one surface of said core-- has been added.

2. The following is an examiner's statement of reasons for allowance: None of the prior art of record taught or suggested that one skilled in the art at the time the invention was made to apply a second pressure upon the assembly during cooling wherein the second pressure was at least 10% greater than the first pressure applied during assembly and heating.

Application/Control Number: 09/368,846
Art Unit: 1733


Page 3

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 703-308-2069. The examiner can normally be reached on Monday-Friday 6:30-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Jeff H. Aftergut
Primary Examiner
Art Unit 1733

JHA
October 9, 2002

OCS_C_045510



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20581
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

21324 7590 10/10/2002
HAHN LOESER & PARKS, LLP
TWIN OAKS ESTATE
1225 W. MARKET STREET
AKRON, OH 44313

EXAMINER

AFTERGUT, JEFF H

ART UNIT

CLASS-SUBCLASS

1733

156-153000

DATE MAILED: 10/10/2002

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/368,846	08/05/1999	KEITH R. LEIGHTON	6014-2-CON	6007

TITLE OF INVENTION: HOT LAMINATION PROCESS FOR THE MANUFACTURE OF A COMBINATION CONTACT/CONTACTLESS SMART CARD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$640	\$0	\$640	01/10/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status.
See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Box ISSUE FEE
Commissioner for Patents
Washington, D.C. 20231
Fax (703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

21324 7590 10/10/2002
HAHN LOESER & PARKS, LLP
TWIN OAKS ESTATE
1225 W. MARKET STREET
AKRON, OH 44313

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
 I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below.

(Depositor's name)
 (Signature)
 (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/368,846	08/05/1999	KEITH R. LEIGHTON	6014-2-CON	6007

TITLE OF INVENTION: HOT LAMINATION PROCESS FOR THE MANUFACTURE OF A COMBINATION CONTACT/CONTACTLESS SMART CARD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$640	\$0	\$640	01/10/2003

EXAMINER	ART UNIT	CLASS-SUBCLASS
AFTERGUT, JEFF H	1733	156-153000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.563).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____
 2 _____
 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) ☐ individual ☐ corporation or other private group entity ☐ government

4a. The following fee(s) are enclosed:

☐ Issue Fee

☐ Publication Fee

☐ Advance Order - # of Copies _____

4b. Payment of Fee(s):

☐ A check in the amount of the fee(s) is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

(Authorized Signature)

(Date)

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/368,846	08/05/1999	KEITH R. LEIGHTON	6014-2-CON	6007
21324	7590	10/10/2002	EXAMINER	
HAHN LOESER & PARKS, LLP				
TWIN OAKS ESTATE				
1225 W. MARKET STREET				
AKRON, OH 44313				
UNITED STATES				
			AFTERGUT, JEFF H	
			ART UNIT	PAPER NUMBER
			1733	
DATE MAILED: 10/10/2002				

Determination of Patent Term Extension under 35 U.S.C. 154 (b)
 (application filed after June 7, 1995 but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (<http://pair.uspto.gov>)



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HAHN LOESER & PARKS, LLP TWIN OAKS ESTATE 1225 W. MARKET STREET AKRON, OH 44313 UNITED STATES			AFTERGUT, JEFF H	
			ART UNIT	PAPER NUMBER
			1733	
DATE MAILED: 10/10/2002				

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If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2002, then the amount due may be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there may be an increase in fees effective on October 1, 2002. See Revision of Patent and Trademark Fees for Fiscal Year 2003: Notice of Proposed Rulemaking, 67 Fed. Reg. 30634, 30636 (May 7, 2002). Although a change to the amount of the publication fee is not currently proposed for October 2002, if the issue fee or publication fee is to be paid on or after October 1, 2002, applicant should check the USPTO web site for the current fees before submitting the payment. The USPTO Internet address for the fee schedule is: <http://www.uspto.gov/main/howtofees.htm>.

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21334 7990 10/16/2002
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Mark A. Watkins (Depositor's name)
[Signature] (Signature)
12/12/02 (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/30/04	06/03/1999	KEITH R. LEIGHTON	6014-3-CON	6007

TITLE OF INVENTION: HOT LAMINATION PROCESS FOR THE MANUFACTURE OF A COMBINATION CONTACT/CONTACTLESS SMART CARD

APPL. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$640	\$0	\$640	01/10/2003

EXAMINER	ART UNIT	CLASS-SUBCLASS
AFTERGUT, JEFF H.	1733	156-153000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.335).

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☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/43, Rev. 03-01, or most recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1. HAHN, LOESER & PARKS, LLP

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3. _____

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[Signature] 12/12/02

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12/16/2002 HMR182 00000041 09360046

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OCS_C_045515

APPROVED	O.G. FIG. 5	
BY	CLASS	SUBCLASS
DRAFTSMAN	156	153

6514367

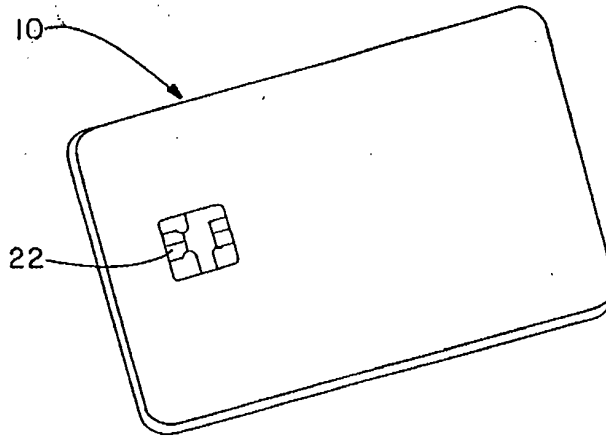


FIG. - 1

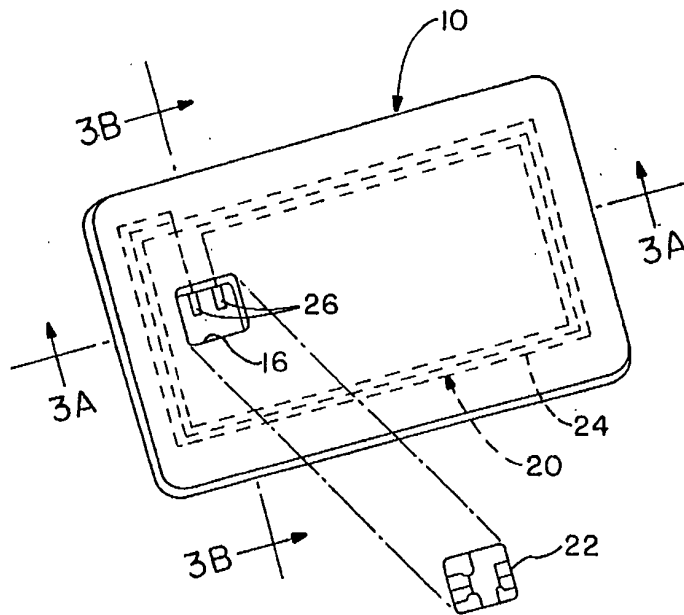


FIG. - 2

APPROVED	O.G. FIG. 5	
BY	CLASS	SUBCLASS
DRAFTSMAN	156	153

FIG.-2A

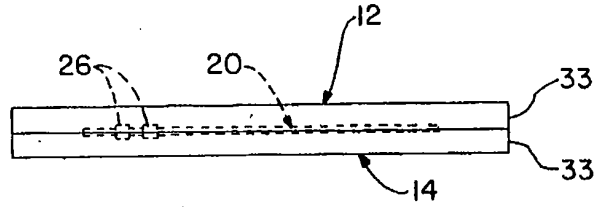


FIG.-3A

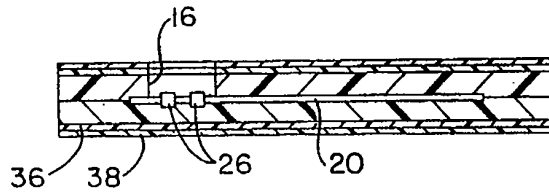


FIG.-3B

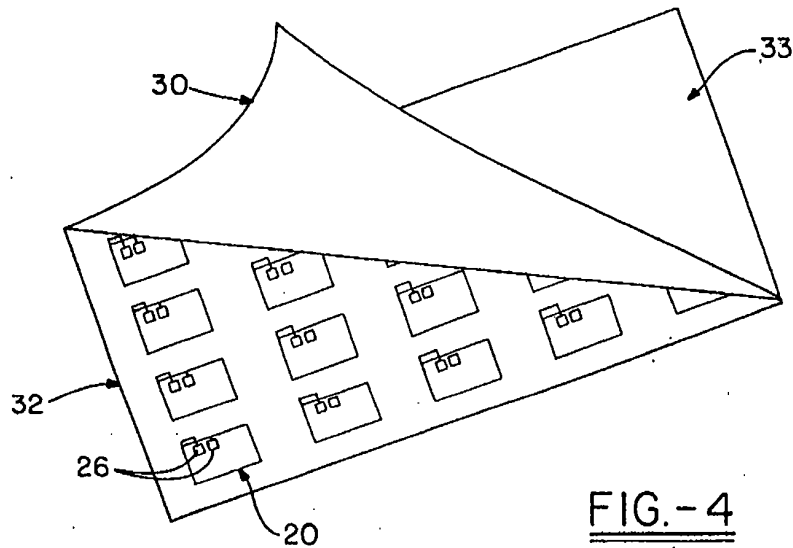
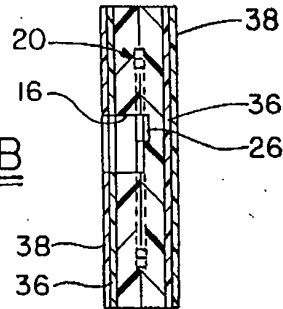
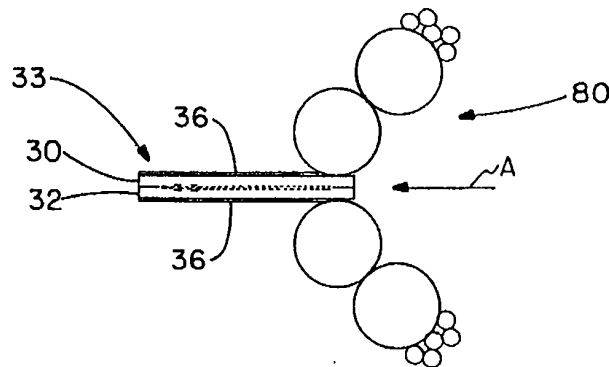
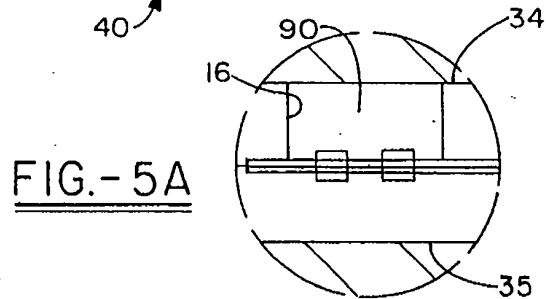
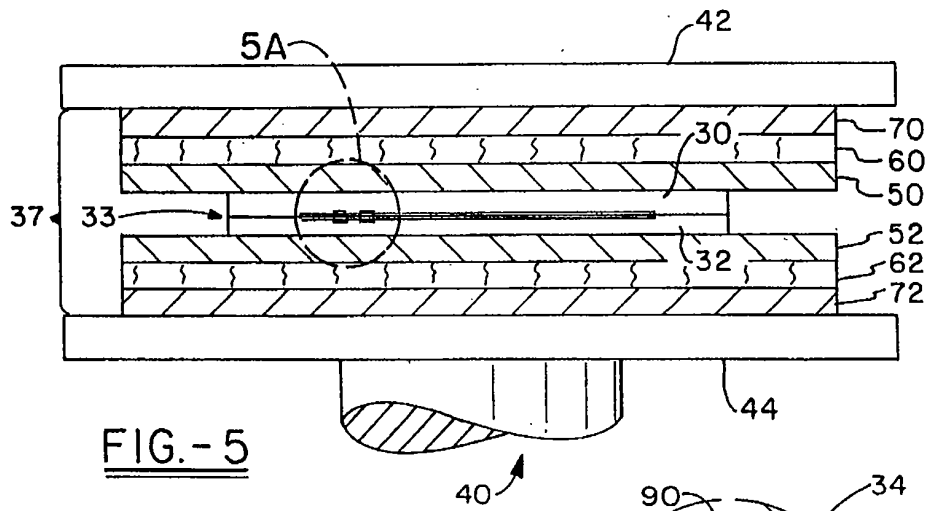


FIG.-4

APPROVED	O.G. FIG. 5
BY	CLASS
DRAFTSMAN	SUBCLASS
	156 153



APPROVED	O.G. FIG. 5	
BY	CLASS	SUBCLASS
DRAFTSMAN	156	153

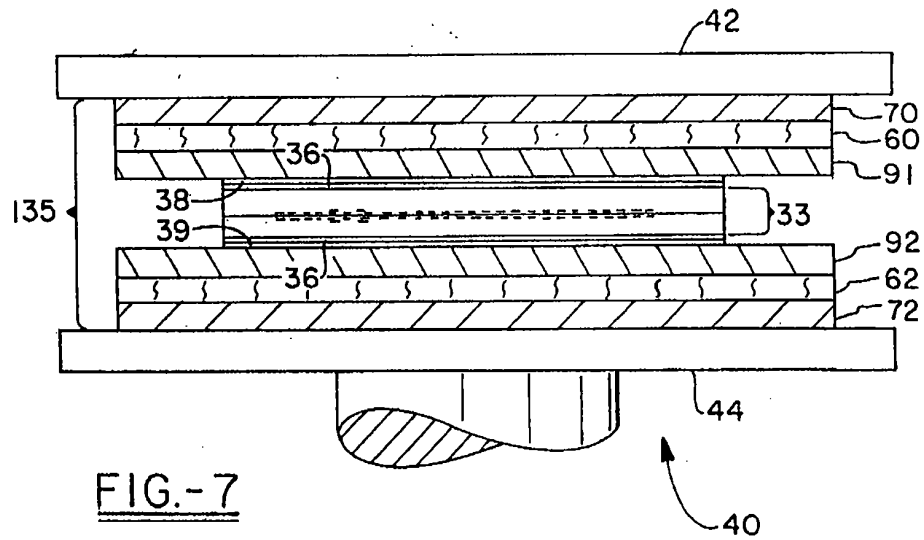
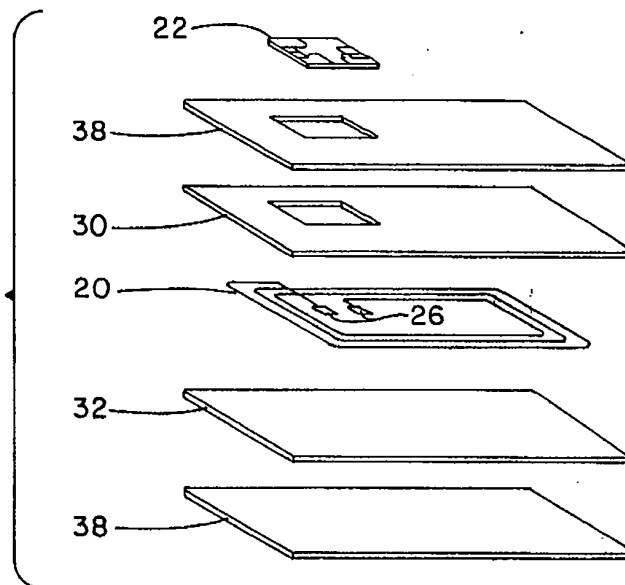


FIG.-7

FIG.-8



PATENT APPLICATION FEE DETERMINATION RECORD Effective November 10, 1998					Application or Docket Number <div style="font-size: 1.2em; margin-top: 5px;">09/368846</div>		
CLAIMS AS FILED - PART I							
		(Column 1)	(Column 2)				
FOR	NUMBER FILED	NUMBER EXTRA					
BASIC FEE							
TOTAL CLAIMS		29 minus 20 = * 9					
INDEPENDENT CLAIMS		2 minus 3 = *					
MULTIPLE DEPENDENT CLAIM PRESENT							
* If the difference in column 1 is less than zero, enter "0" in column 2							
CLAIMS AS AMENDED - PART II							
		(Column 1)	(Column 2)	(Column 3)			
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA				
	Total	* 29	Minus	** 29	= -		
	Independent	* 3	Minus	*** 3	= -		
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM						
SMALL ENTITY TYPE <input type="checkbox"/> OR OTHER THAN SMALL ENTITY							
RATE		FEE		OR		RATE	
		380.00				760.00	
X\$ 9=		36				X\$18=	
X39=						X78=	
+130=						+260=	
TOTAL		476				TOTAL	
SMALL ENTITY TYPE <input type="checkbox"/> OR OTHER THAN SMALL ENTITY							
RATE		ADDITIONAL FEE		OR		RATE	
X\$ 9=						X\$18=	
X39=						X78=	
+130=						+260=	
TOTAL ADDIT. FEE						TOTAL ADDIT. FEE	
AMENDMENT B							
		(Column 1)	(Column 2)	(Column 3)			
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA				
	Total	*	Minus	**	=		
	Independent	*	Minus	***	=		
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM						
SMALL ENTITY TYPE <input type="checkbox"/> OR OTHER THAN SMALL ENTITY							
RATE		ADDITIONAL FEE		OR		RATE	
X\$ 9=						X\$18=	
X39=						X78=	
+130=						+260=	
TOTAL ADDIT. FEE						TOTAL ADDIT. FEE	
AMENDMENT C							
		(Column 1)	(Column 2)	(Column 3)			
AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA				
	Total	*	Minus	**	=		
	Independent	*	Minus	***	=		
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM						
SMALL ENTITY TYPE <input type="checkbox"/> OR OTHER THAN SMALL ENTITY							
RATE		ADDITIONAL FEE		OR		RATE	
X\$ 9=						X\$18=	
X39=						X78=	
+130=						+260=	
TOTAL ADDIT. FEE						TOTAL ADDIT. FEE	
<p>* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.</p> <p>** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."</p> <p>*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."</p> <p>The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.</p>							

United States Patent [19][11] **3,994,225****Sitzberger**[45] **Nov. 30, 1976**[54] **METHOD OF PRODUCING PERSONALIZED BADGES AND THE LIKE**[75] Inventor: **Francis D. Sitzberger**, Downers Grove, Ill.[73] Assignee: **Adcraft Mfg. Co.**, Chicago, Ill.[22] Filed: **Nov. 26, 1975**[21] Appl. No.: **635,284****Related U.S. Application Data**

[63] Continuation of Ser. No. 446,238, Feb. 27, 1974, abandoned.

[52] **U.S. Cl.**..... **101/426; 40/2.2; 101/369; 101/90; 346/33 R; 346/153; 96/27 R**[51] **Int. Cl.²**..... **B41M 3/00; B41L 45/12**[58] **Field of Search**..... **101/426, 369**[56] **References Cited****UNITED STATES PATENTS**

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R27,809	11/1973	Drillick	101/18

Primary Examiner—Clyde I. Coughenour
Attorney, Agent, or Firm—Hill, Gross, Simpson, Van Santen, Steadman, Chiara & Simpson

[57]

ABSTRACT

A method of fabricating a plurality of individual badges such as name badges and the like, each bearing indicial material common to all of such plurality of badges, and each bearing specific indicial material exclusive to the respective individual badges, in which the badge blanks are initially imprinted with the common indicial material and subsequently provided with the respective exclusive indicial material by an electrostatic or photocopying process.

3 Claims, 4 Drawing Figures